

Office Action Summary

Application No.

09/518,117

Applicant(s)

HSU ET AL.

Examiner

Negussie Worku

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received. JEROME GRANT II
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. JEROME GRANT II

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Objection to the Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, in claim 1, "Increasing scanning resolution of a scanner through controlling the driving system, a CCD, and step motor" is not supported by the drawing, and must be shown or the feature(s) canceled from the claim(s).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, are rejected under 35 U.S.C. 102(b) as being anticipated by Koshiyouji et al. (USP 5,150,227).

With respect to claim 1, Koshiyouji discloses a method of increasing scanning resolution of a scanner, see (col.4, line 47-51) through controlling its driving system, (controller 15 of fig 1, controlling its driving system step-motor 13 of fig 1, see col.4, lines 15-16) comprising the step of: providing shift gate clock pulses, (step-motor shift pulse from step-motor provide pules to shift CCD line sensor, see col.4, lines 64-65), to

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a CCD such that one shift gate clock pulse period corresponding to an exposure cycle for the CCD, (21 of fig 2), see (col.6, lines 64-68); and providing motor pulses to a motor, see col.5, lines 50-54), such that one motor pulse period (number of pulse supplied to the motor 13 of fig 3) corresponds to a plurality of exposure cycles (light from illuminating device 19 of fig 1) for the charge-coupled-device (CCD 21 of fig 3).

With respect to claim 2, Koshiyouji et al. discloses a method (as shown in fig 3) wherein the motor includes a stepper motor, (13 of fig 1, is a step-motor), see (col.4, lines 7-8).

With respect to claim 3, Koshiyouji discloses a method (as shown in fig 1 and 2) of increasing scanning resolution of a scanner see (col.4, line 47-51), through controlling its driving system, (controller 15 of fig 1, controlling its driving system step-motor 13 of fig 1, see col.4, lines 15-16), comprising: the step of providing motor pulse signals to a CCD device, (shift pulse provided from step-motor provide to shift CCD line sensor, see col.4, lines 64-65); and adjusting (CPU 27 of fig 3, adjust the timing, col.9, lines 5-12), a timing relationship, see (col.9, lines 30-35) between the motor pulse (motor pulse signals 501 and 504 of fig 5), and the shift gate clock pulse (clock pulse fCL of fig 3, generate by clock generate 26 of fig 3), such that one motor pulse cycle corresponds to a plurality of shift gate clock pulse cycles, see (col.9, lines 5-15).

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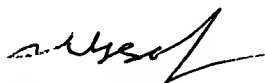
With respect to claim 4, Koshiyouji discloses wherein one shift gate clock cycle corresponds to an exposure cycle (light from illuminating device 19 of fig 1) for the CCD, see (col.6, lines 64-65).

With respect to claim 5, Koshiyouji et al. discloses a method (as shown in fig 3) wherein the motor includes a stepper motor, (13 of fig 1, is a step-motor), see (col.4, lines 7-8).

3. Any inquiry concerning this communication or earlier communication from Examiner should be directed to Negussie Worku whose telephone number is (703) 305 5441.

The Examiner can normally be reached on M-F, 9 am - 6 pm if attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, David Moore, can be reached on (703) 308-7452.

The fax phone number for the organization where this application or proceeding is assigned is (703) 306-5406, and any inquiry of general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


Negussie Worku

12/14/02

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